

**ABSTRACT**

The invention relates to applying a patch to a tissue surface within a mammalian body that includes retaining the patch to a deployment device, advancing the deployment device to the tissue surface, pressing the patch against the tissue surface, and  
5 manipulating the deployment device to separate the deployment device from the patch and leave the patch against the tissue surface. The patch includes at least one layer of a biocompatible polymer, at least one layer of a biocompatible superelastic/shape memory material, and at least one layer of a biocompatible adherent material. The deployment  
10 device includes a handle section and a deployment section, and the deployment section is configured to retain the patch for delivery of the patch to the tissue surface. The patch may include one or more arms, a base, and barbs extending from the arms, and advancing the deployment device to the tissue surface may include advancing the deployment device to the tissue surface of the heart for treatment of, for example, congestive heart failure.